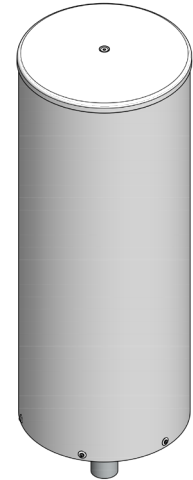


## Filtronic Next Generation Base Station Antennas

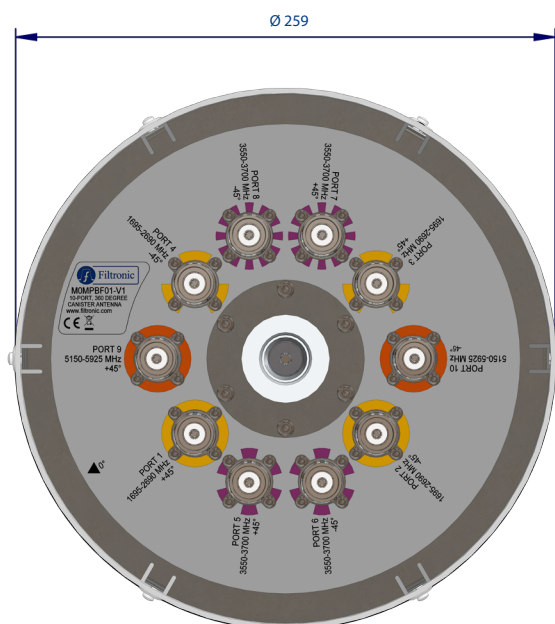
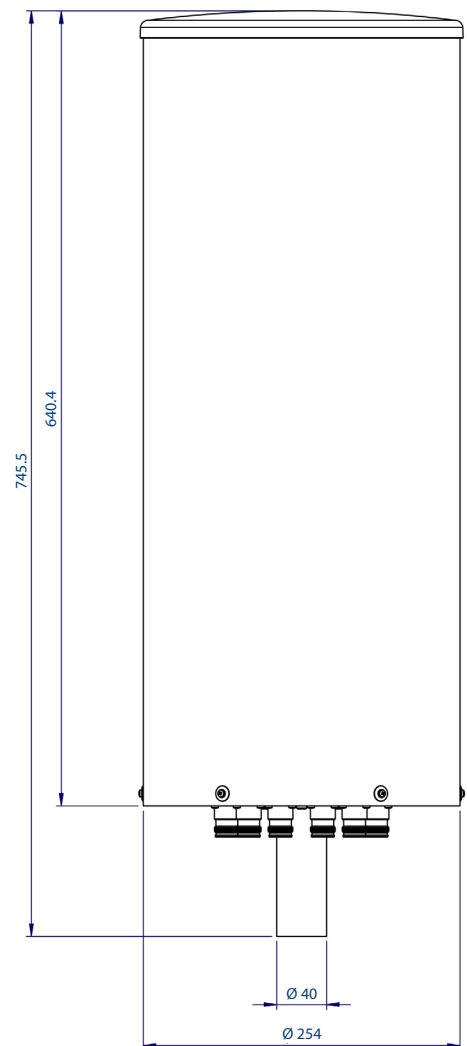
- Innovative Ultra Wide Band Slotted Disc Antenna Technology.

	HB 1	HB 2	HB 3
Frequency Range	1695-2690	3550-3700	5150-5925
Gain Over All Tilts [dBi]	9.3	8.8	5.5
Polarization	X	X	X
Azimuth Beamwidth [°]	360	360	360
Electrical Downtilt [°]	2	2	2
Ports Per Band	4	4	2



## Specifications and Layouts

MECHANICAL SPECIFICATIONS	
Antenna Dimensions: Length, Diameter [mm]	640.4 x 254
Net Weight (Antenna) [kg]	7.1
Connector Type	4.3-10
Connector Quantity	10
Connector Position	Bottom
Windload, Calculation [km/h]	150
Windload, Maximum [N]	85
Survival Wind Speed [km/h]	241.4
Radome Material	ASA
Radome Colour [RAL]	7035
Product Environmental Compliance	RoHS
Lightning Protection	DC Ground



ELECTRICAL SPECIFICATIONS	HB 1					HB2	HB 3
	Frequency Range [MHz]	1695-1780	1850-1995	2095-2200	2300-2400	2496-2690	3500-3700
Gain, average [dBi]	8.5	8.8	9.3	9.8	10.5	8.8	5.5
Azimuth Beamwidth [°]	360 (pseudo)					360 (pseudo)	360 (pseudo)
Elevation Beamwidth [°]	19.0 ±4.0					19.0 ±1.0	25.0 ±5.0
Electrical Downtilt [°]	2	2	2	2	2	2	2
Elevation Downtilt Deviation [°]	1	1	1	1	1	1	2
Cross Polar Discrimination Over Sector [dB]	12	15	15	12	12	8	8
First Upper Side Lobe Suppression [dB]	17	17	17	17	17	16	15
Upper Side Lobe Suppression [dB]	15	15	15	15	15	15	15
Polarization [°]	±45					±45	±45
Impedance [Ω]	50					50	50
VSWR	< 1.5:1					< 1.5:1	< 1.5:1
Return Loss [dB]	< -14.0					< -14.0	< -14.0
Cross Polar Isolation [dB]	25					25	25
Interband Isolation [dB]	25					25	25
Passive Intermodulation [dBc]	< -153					< -150	-
Maximum Effective Power Per Port [W]	100					50	10

#### SHIPPING VARIANT

Packing Size: Length, Width, Depth [mm]	864 x 458 x 458	
Shipping Weight [kg], P/N	11.4	MOMPBF01-V1-P1

#### ENVIRONMENTAL COMPLIANCE

ETSI EN300019-1-1 for Storage	Class 1.2
ETSI EN300019-1-2 for Transportation	Class 2.3
ETSI EN300019-1-4 for Environmental Conditions	Class 4.1E
Cold Temperature Survival [°C]	-40
Hot Temperature Survival [°C]	60

Filtronic follows the definitions and recommendations per NGMN P-Basta version 10.0 ([www.ngmn.org](http://www.ngmn.org)) within parameters shown on this datasheet.

All specifications are subject to change without notice. Visit [www.filtronic.com](http://www.filtronic.com) for the most current datasheets.

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